

ABSTRACT OF THE DISCLOSURE

A solid state image pickup device has: an n-type semiconductor substrate; a p-type layer formed in the n-type substrate; a first n-type region formed in the p-type layer and constituting a photodiode therewith; a first gate structure
5 including a charge storage region and a control gate, formed on the semiconductor substrate adjacent to the first region; a second n-type region formed adjacent to the first gate structure on opposite side to the first region, constituting a non-volatile memory element with the first region and the first gate structure; and a control
10 circuit for applying write and read voltages to the control gate, for tunneling and writing charges, and for reading stored information. A solid state image pickup device is provided which can execute a novel pixel signal read operation.